WHAT IS CLAIMED IS:

1.   A multi-chip module comprising:

a plurality of first semiconductor chips surface-mounted on a surface of a mounting board for exchanging signals with each other;

a second semiconductor chip mounted back-to-back with at least one of said plurality of first semiconductor chips, said second semiconductor chip having most of bonding pads thereof arranged along one side thereof;

bonding wires for connecting the bonding pads of said second semiconductor chip and corresponding electrodes formed on said mounting board; and

a sealing member for encapsulating said plurality of first semiconductor chips, said second semiconductor chip and the said bonding wire on said mounting board.

2.   A multi-chip module according to Claim 1,

wherein said plurality of first semiconductor chips include a microcomputer, a random access memory and a signal processing device for processing signals for specific applications, respectively and

wherein said second semiconductor chip is a nonvolatile memory.

3.   A multi-chip module according to Claim 2,

wherein said microcomputer and said random access memory or said signal processing device for processing the signal for specified applications which

is connected to said microcomputer are interconnected by wiring formed on the mounting board by imposition; and

wherein said microcomputer includes an exclusive interface corresponding to said nonvolatile memory, said microcomputer and said nonvolatile memory being interconnected through said bonding wire.

4.   A multi-chip module according to Claim 3, wherein said nonvolatile memory is mounted back-to-back with said first semiconductor chips including said microcomputer.

5.   A multi-chip module according to Claim 4, wherein said first semiconductor chips mounted back-to-back with said nonvolatile memory include said microcomputer and said random access memory; and

wherein the long side of the semiconductor chip constituting said random access memory and the long side of the semiconductor chip constituting said nonvolatile memory are arranged orthogonally to each other.